Plastics to Bacteria; or (9/98)

- non-biodegradable under OECD test 301B: [CO₂ Evolution (Modified Sturm Test)]. (9/98)
- (g) Effective November 8, 1985, the placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates to the Department, and the Regional Administrator determines, that: (12/92; 12/93)
- (1) The only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains, or may reasonably be anticipated to contain, hazardous waste; and
- (2) Placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in Department regulation R.61-68. (11/90)

265.315 Special requirements for containers

Unless they are very small, such as an ampule, containers must be either:

- (a) At least 90 percent full when placed or buried in the landfill; or (6/95)
- (b) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before placement or burial in the landfill. (6/95)

265.316 Disposal of small containers of hazardous waste in overpacked drums (lab packs)

Small containers of hazardous waste in overpacked drums (lab packs) may be placed in a landfill if the following requirements are met:

- (a) Hazardous waste must be packaged in non-leaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the waste held therein. Inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the Department of Transportation (DOT) hazardous materials regulations (49 CFR parts 173, 178 and 179), if those regulations specify a particular inside container for the waste.
- (b) The inside containers must be overpacked in an open head DOT-specification metal shipping container (49 CFR parts 178 and 179) of no more than 416-liter (110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of sorbent material, determined to be nonbiodegradable in accordance with 265.314(f), to completely sorb all of the liquid contents of the inside containers. The metal outer container must be full after it has been packed with inside containers and sorbent material. (12/93)
- (c) The sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers, in accordance with 265.17(b). (12/93)

- (d) Incompatible wastes, as defined in R.61-(iii) The sorbent material is determined to be 79.260.10(a) of this chapter, must not be placed in the same outside container.
 - (e) Reactive waste, other than cyanide- or sulfidebearing waste as defined in R.61-79.261.23(a)(5) of this chapter, must be treated or rendered nonreactive prior to packaging in accordance with paragraphs (a) through (d) of this section. Cyanide- and sulfide-bearing reactive waste may be packaged in accordance with paragraphs (a) through (d) of this section without first being treated or rendered nonreactive.
 - (f) Such disposal is in compliance with the requirements part 268. Persons who incinerate lab packs according to the requirements in 268.42(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums must meet the DOT specifications in 49 CFR 173.12 and be overpacked according to the requirements in paragraph (b) of this section. (12/92)

Subpart O - INCINERATORS

265.340 Applicability (6/03)

(a) The regulations of this Subpart apply to owners and operators of hazardous waste incinerators (as defined in 260.10 of this chapter), except as 265.1 provides otherwise.

The following facility owners or operators are considered to incinerate hazardous waste: (12/93)

- (1) Owners or operators of hazardous waste incinerators (as defined in R.61-79.260.10 of this chapter).
- (2) Owners or operators who burn hazardous waste in boilers or in industrial furnaces in order to destroy them, or who burn hazardous waste in boilers or in industrial furnaces for any recycling purpose and elect to be regulated under this regulation.
 - (b) Integration of the MACT standards.
- (1) Except as provided by (b)(2) and (b)(3), the standards no longer apply when an owner or operator demonstrates compliance with the maximum achievable control technology (MACT) requirements of 40 CFR part 63, Subpart EEE, by conducting a comprehensive performance test and submitting to the Department a Notification of Compliance under 63.1207(j) and 63.1210(b) documenting compliance with the requirements of part 63, Subpart EEE,.
- (2) The following requirements continue to apply even where the owner or operator has demonstrated compliance with the MACT requirements of part 63, Subpart EEE: 265.351 (closure) and the applicable requirements of Subparts A through H, BB and CC.
- (3) Section 265.345 generally prohibiting burning of hazardous waste during startup and shutdown remains in effect if you elect to comply with 270.235(a)(1)(i) to minimize emissions of toxic compounds from startup and shutdown.
- (c) Owners and operators of incinerators burning hazardous waste are exempt from all of the requirements

of this Subpart, except 265.351 (Closure), provided that the owner or operator has documented, in writing, that the waste would not reasonably be expected to contain any of the hazardous constituents listed in part 261, Appendix VIII, of this chapter, and such documentation is retained at the facility, if the waste to be burned is:

265.341 Waste analysis

In addition to the waste analyses required by section 265.13, the owner or operator must sufficiently analyze any waste which he has not previously burned in his incinerator to enable him to establish steady state (normal) operating conditions (including waste and auxiliary fuel feed and air flow) and to determine the type of pollutants which might be emitted. At a minimum, the analysis must determine: (12/93)

- (a) Heating value of the waste;
- (b) Halogen content and sulfur content in the waste; and
- (c) Concentrations in the waste of lead and mercury, unless the owner or operator has written, documented data that show that the element is not present. [Comment: As required by 265.73, the owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility.] (12/92)

265.342 - 265.344 [Reserved]

265.345 General operating requirements

During startup and shutdown of an incinerator, the owner or operator must not feed hazardous waste unless the incinerator is at steady state (normal) conditions of operation, including steady state operating temperature and airflow. (12/92)

265.346 [Reserved]

265.347 Monitoring and inspections

The owner or operator must conduct, as a minimum, the following monitoring and inspections when incinerating hazardous waste:

- (a) Existing instruments which relate to combustion and emission control must be monitored at least every 15 minutes. Appropriate corrections to maintain steady state combustion conditions must be made immediately either automatically or by the operator. Instruments which relate to combustion and emission control would normally include those measuring waste feed, auxiliary fuel feed, air flow, incinerator temperature, scrubber flow, scrubber pH, and relevant level controls.
- (b) The complete incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills, and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

265.348 - 265.350 [Reserved]

265.351 Closure

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including but not limited to ash, scrubber waters, and scrubber sludges) from the incinerator.

[Comment: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with 261.3(d) of this chapter, that the residue removed from his incinerator is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262 through 266 and 268 of this chapter.] (12/92)

265.352 Interim status incinerators burning particular hazardous wastes

- (a) Owners or operators of incinerators subject to this subpart may burn EPA Hazardous Wastes F020, F021, F022, F023, F026, or F027 if they receive a certification from the Department that they can meet the performance standards of subpart O of part 264 when they burn these wastes
- (b) The following standards and procedures will be used in determining whether to certify an incinerator:
- (1) The owner or operator will submit an application to the Department containing applicable information in R.61-79.270.19 and 270.62 demonstrating that the incinerator can meet the performance standards in subpart O of part 264 when they burn these wastes.
- (2) The Department will issue a tentative decision as to whether the incinerator can meet the performance standards in subpart O of part 264. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the incinerator is located. The Department will accept comment on the tentative decision for 60 days. The Department also may hold a public hearing upon request or at its discretion.
- (3) After the close of the public comment period, the Department will issue a decision whether or not to certify the incinerator.

265.353 - 265.369 [Reserved 6/03]

Subpart P - THERMAL TREATMENT

265.370 Other thermal treatment

The regulations in this subpart apply to owners or operators of facilities that thermally treat hazardous waste in devices other than enclosed devices using controlled flame combustion, except as section 265.1 provides otherwise. Thermal treatment in enclosed devices using controlled flame combustion is subject to the requirements of subpart O if the unit is an incinerator or a boiler or industrial furnace which burns hazardous

wastes in order to destroy them, and subpart H of part 266, if the unit is a boiler or an industrial furnace as defined in 260.10 which burns hazardous waste for energy recovery. (12/92 & 5/93)

265.371 - 265.372 [Reserved]

265.373 General operating requirements

Before adding hazardous waste, the owner or operator must bring his thermal treatment process to steady state (normal) conditions of operation - including steady state operating temperature - using auxiliary fuel or other means, unless the process is a noncontinuous (batch) thermal treatment process which requires a complete thermal cycle to treat a discrete quantity of hazardous waste.

265.374 [Reserved]

265.375 Waste analysis

In addition to the waste analyses required by subpart B section 265.13, the owner or operator must sufficiently analyze any waste which he has not previously treated in his thermal process to enable him to establish steady state (normal) or other appropriate (for a noncontinuous process) operating conditions (including waste and auxiliary fuel feed) and to determine the type of pollutants which might be emitted. At a minimum, the analysis must determine:

- (a) Heating value of the waste;
- (b) Halogen content and sulfur content in the waste; and
- (c) Concentrations in the waste of lead and mercury, unless the owner or operator has written, documented data that show that the element is not present. [Comment: As required by 265.73, the owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility.] (12/92)

265.376 [Reserved]

265.377 Monitoring and inspections

- (a) The owner or operator must conduct, as a minimum, the following monitoring and inspections when thermally treating hazardous waste:
- (1) Existing instruments which relate to temperature and emission control (if an emission control device is present) must be monitored at least every 15 minutes. Appropriate corrections to maintain steady state or other appropriate thermal treatment conditions must be made immediately either automatically or by the operator. Instruments which relate to temperature and emission control would normally include those measuring waste feed, auxiliary fuel feed, treatment process temperature, and relevant process flow and level controls.
 - (2) The stack plume (emissions), where present,

must be observed visually at least hourly for normal appearance (color and opacity). The operator must immediately make any indicated operating corrections necessary to return any visible emissions to their normal appearance.

(3) The complete thermal treatment process and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills, and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

265.378 - 265.380 [Reserved]

265.381 Closure

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash) from the thermal treatment process or equipment.

[Comment: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with 261.3(c) or (d) of this chapter, that any solid waste removed from his thermal treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, 265 and 268.] (12/92)

265.382 Open burning; waste explosives

Open burning of hazardous waste is prohibited except for the open burning and detonation of waste explosives. Waste explosives include waste which has the potential to detonate and bulk military propellants which cannot safely be disposed of through other modes of treatment. Detonation is an explosion in which chemical transformation passes through the material faster than the speed of sound (0.33 kilometers/second at sea level). Owners or operators choosing to open burn or detonate waste explosives must do so in accordance with the following table and in a manner that does not threaten human health or the environment.

Pounds of	Minimum distance
waste	from open burning or
explosives or	detonation to the
propellants	property of others
0 to 100	204 meters (670 ft)
101 to 1,000	380 meters (1,250 ft)
1,001 - 10,000.	530 meters (1,730 ft)
10,001-130,000	690 meters (2,260 ft)

265.383 Interim status thermal treatment devices burning particular hazardous waste

(a) Owners or operators of thermal treatment devices subject to this subpart may burn EPA Hazardous Wastes F020, F021, F022, F023, F026, or F027 if they receive a certification from the Department that they can meet the performance standards of subpart O of part 264 when they burn these wastes.

(b) The following standards and procedures will be

used in determining whether to certify a thermal treatment unit:

- (1) The owner or operator will submit an application to the Department containing the applicable information in 270.19 and 270.62 demonstrating that the thermal treatment unit can meet the performance standard in subpart O of part 264 when they burn these wastes.
- (2) The Department will issue a tentative decision as to whether the thermal treatment unit can meet the performance standards in subpart O of part 264. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the thermal treatment device is located. The Department will accept comment on the tentative decision for 60 days. The Department also may hold a public hearing upon request or at its discretion.
- (3) After the close of the public comment period, the Department will issue a decision whether or not to certify the thermal treatment unit.

Subpart Q - CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT

265.400 Applicability

The regulations in this subpart apply to owners and operators of facilities which treat hazardous wastes by chemical, physical, or biological methods in other than tanks, surface impoundments, and land treatment facilities, except as section 265.1 provides otherwise. Chemical, physical, and biological treatment of hazardous waste in tanks, surface impoundments, and land treatment facilities must be conducted in accordance with subparts J, K, and M, respectively. (12/93)

265.401 General operating requirements

- (a) Chemical, physical, or biological treatment of hazardous waste must comply with paragraph 265.17(b). (12/93)
- (b) Hazardous wastes or treatment reagents must not be placed in the treatment process or equipment if they could cause the treatment process or equipment to rupture, leak, corrode, or otherwise fail before the end of its intended life.
- (c) Where hazardous waste is continuously fed into a treatment process or equipment, the process or equipment must be equipped with a means to stop this inflow (e.g., a waste feed cut-off system or by-pass system to a standby containment device).

[Comment: These systems are intended to be used in the event of a malfunction in the treatment process or equipment.] (12/92)

265.402 Waste analysis and trial tests

(a) In addition to the waste analysis required by section 265.13, whenever: (12/93)

(1) A hazardous waste which is substantially

- different from waste previously treated in a treatment process or equipment at the facility is to be treated in that process or equipment, or (12/92)
- (2) A substantially different process than any previously used at the facility is to be used to chemically treat hazardous waste; the owner or operator must, before treating the different waste or using the different process or equipment:
- (i) Conduct waste analyses and trial treatment tests (e.g., bench scale or pilot plant scale tests); or
- (ii)Obtain written, documented information on similar treatment of similar waste under similar operating conditions; to show that this proposed treatment will meet all applicable requirements of 265.401 (a) and (b). (12/93)

Comment: As required by 265.13, the waste analysis plan must include analyses needed to comply with 265.405 and 265.406. As required by 265.73, the owner or operator must place the results from each waste analysis and trial test, or the documented information, in the operating record of the facility. (12/92)

265.403 Inspections

- (a) The owner or operator of a treatment facility must inspect, where present:
- (1) Discharge control and safety equipment (e.g., waste feed cut-off systems, by-pass systems, drainage systems, and pressure relief systems) at least once each operating day, to ensure that it is in good working order;
- (2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges), at least once each operating day, to ensure that the treatment process or equipment is being operated according to its design;
- (3) The construction materials of the treatment process or equipment, at least weekly, to detect corrosion or leaking of fixtures or seams; and
- (4) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes), at least weekly, to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

[Comment: As required by 265.15(c), the owner or operator must remedy any deterioration or malfunction he finds.] (12/92)

265.404 Closure

At closure, all hazardous waste and hazardous waste residues must be removed from treatment processes or equipment, discharge control equipment, and discharge confinement structures.

[Comment: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with 261.3 (c) or (d) of this chapter, that any solid waste removed from his treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of parts 262, 263, and 265 and 268.]

(12/92; 12/93)

265.405 Special requirements for ignitable or reactive waste

- (a) Ignitable or reactive waste must not be placed in a treatment process or equipment unless:
- (1) The waste is treated, rendered, or mixed before or immediately after placement in the treatment process or equipment so that (i) the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under 261.21 or 261.23 or this chapter, and (ii) section 265.17(b) is complied with; or (12/93)
- (2) The waste is treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react.

265.406 Special requirements for incompatible wastes

- (a) Incompatible wastes, or incompatible wastes and materials, (see Appendix V for examples) must not be placed in the same treatment process or equipment, unless 265.17(b) is complied with. (12/93)
- (b) Hazardous waste must not be placed in unwashed treatment equipment which previously held an incompatible waste or material, unless 265.17(b) is complied with. (12/93)

265.407 - 265.429 [Reserved] 265.430 [Reserved 6/95]

Subparts R-V [Reserved]

Subpart W - DRIP PADS (12/92)

265.440 Applicability

- (a) The requirements of this subpart apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage, precipitation, and/or surface water runoff to an associated collection system. Existing drip pads are those constructed before December 6, 1990, and those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990. All other drip pads are new drip pads. The requirement at 265.443(b)(3) to install a leak collection system applies only to those drip pads that are constructed after December 24, 1992 except for those constructed after December 24, 1992 for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 24, 1992. (12/93)
- (b) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither runoff nor runon is generated is not subject to regulation under 265.443(e) or 265.443(f), as appropriate.
- (c) The requirements of this subpart are not applicable to the management of infrequent and

incidental drippage in storage yards provided that: (12/93)

- (1) The owner or operator maintains and complies with a written contingency plan that describes how the owner or operator will respond immediately to the discharge of such infrequent and incidental drippage. At a minimum, the contingency plan must describe how the facility will do the following:
 - (i) Clean up the drippage;
 - (ii) Document the cleanup of the drippage;
- (iii) Retain documents regarding cleanup for three years; and
- (iv) Manage the contaminated media in a manner consistent with State regulations.

265.441 Assessment of existing drip pad integrity

- (a) For each existing drip pad as defined in 265.440 of this subpart, the owner or operator must evaluate the drip pad and determine that it meets all of the requirements of this subpart, except the requirements for liners and leak detection systems of 265.443(b). No later than the effective date of this rule, the owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all of the standards of 265.443 of this subpart are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of 265.443 of this subpart, except the standards for liners and leak detection systems, specified in 265.443(b) of this subpart. (12/93)
- (b) The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of 265.443(b) of this subpart, and submit the plan to the Department no later than 2 years before the date that all repairs, upgrades, and modifications are complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of 265.443 of this subpart. The plan must be reviewed and certified by an independent qualified, registered professional engineer. (12/93)
- (c) Upon completion of all, repairs, and modifications, the owner or operator must submit to the Department the as-built drawings for the drip pad together with a certification by an independent, qualified registered professional engineer attesting that the drip pad conforms to the drawings.
- (d) If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of 265.443(m) of this subpart or close the drip pad in accordance with 265.445 of this subpart.

265.442 Design and installation of new drip pads

Owners and operators of new drip pads must ensure that the pads are designed, installed, and operated in accordance with one of the following: (12/93)

- (a) All of the applicable requirements of 265.443 (except 265.443(a)(4)), 265.444 and 265.445 of this subpart, or (12/93)
- (b) All of the applicable requirements of 265.443 (except 265.443(b)), 265.444 and 265.445 of this subpart. (12/93)

265.443 Design and operating requirements

(a) Drip pads must:

- (1) Be constructed of nonearthen materials, excluding wood and nonstructurally supported asphalt;
- (2) Be sloped to free-drain treated wood drippage, rain and other waters, or solutions of drippage and water or other wastes to the associated collection system;
 - (3) Have a curb or berm around the perimeter; (4)(12/93)
- (i) Have a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to $1x10^{-7}$ centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to existing drip pads and those drip pads for which the owner or operator elects to comply with 265.442(b) instead of 265.442(a). (12/93; revised 12/94)
- (ii) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this section, except for subsection (b). (12/93; revised 12/94 and note removed)
- (5) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation, and the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc. Note: The Department will generally consider applicable standards established by professional organizations generally recognized by industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirement of this paragraph.

- (b) If an owner/operator elects to comply with 265.442(a) instead of 265.442(b), the drip pad must have: (12/93; 12/94)
- (1) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and prevent releases into the adjacent subsurface soil or ground water or surface water during the active life of the facility. The liner must be:
- (i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);
- (ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and
- (iii) Installed to cover all surrounding earth that could come in contact with the waste or leakage; and
- (2) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system must be:
 - (i) Constructed of materials that are:
- (A) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and
- (B) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad; and
- (ii)Designed and operated to function without clogging through the scheduled closure of the drip pad.
- (iii) Designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.
- (3) A leakage collection system immediately above the liner that is designed, constructed, maintained and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log. (12/93)
- (c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be

released from the drip pad.

Note: See 265.443(m) for remedial action required if deterioration or leakage is detected.

- (d) The drip pad and associated collection system must be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent runoff.
- (e) Unless protected by a structure, as described in 265.440(b) of this subpart, the owner or operator must design, construct, operate and maintain a runon control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm unless the system has sufficient excess capacity to contain any runon that might enter the system, or the drip pad is protected by a structure or cover, as described in 265.440(b) of this subpart.
- (f) Unless protected by a structure or cover, as described in 265.440(b) of this subpart, the owner or operator must design, construct, operate and maintain a runoff management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- (g) The drip pad must be evaluated to determine that it meets the requirements of paragraphs (a) through (f) of this section and the owner or operator must obtain a statement from an independent, qualified registered professional engineer certifying that the drip pad design meets the requirements of this section.
- (h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.
- (i) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as hazardous waste, so as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and the cleaning procedure used in the facility's operating log. (12/93)
- (j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.
- (k) After being removed from the treatment vessel, treated wood from pressure and nonpressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with this requirement.
- (1) Collection and holding units associated with runon and runoff control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.
- (m) Throughout the active life of the drip pad, if the owner or operator detects a condition that may have

- caused or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:
- (1) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage by the leak detection system), the owner or operator must:
- (i) Enter a record of the discovery in the facility operating log;
- (ii) Immediately remove the portion of the drip pad affected by the condition from service;
- (iii) Determine what steps must be taken to repair the drip pad, remove any leakage from below the drip pad, and establish a schedule for accomplishing the clean up and repairs;
- (iv) Within 24 hours after discovery of the condition, notify the Department of the condition and, within 10 working days, provide a written notice to the Department with a description of the steps that will be taken to repair the drip pad, and clean up any leakage, and the schedule for accomplishing this work.
- (2) The Department will review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete, and notify the owner or operator of the determination and the underlying rationale in writing.
- (3) Upon completing all repairs and clean up, the owner or operator must notify the Department in writing and provide a certification, signed by an independent qualified, registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with paragraph (m)(1)(iv) of this section.
- (n) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

265.444 Inspections

- (a) During construction or installation, liners and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners must be inspected and certified as meeting the requirements of 265.443 of this subpart by an independent qualified, registered professional engineer. The certification must be maintained at the facility as part of the facility operating record. After installation liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.
- (b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of

any of the following:

- (1) Deterioration, malfunctions or improper operation of runon and runoff control systems;
- (2) The presence of leakage in and proper functioning of leakage detection system.
- (3) Deterioration or cracking of the drip pad surface.

Note: See 265.443(m) for remedial action required if deterioration or leakage is detected.

265.445 Closure

- (a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.
- (b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in paragraph (a) of this section, the owner or operator finds that not all contaminated subsoils can be practically removed or decontaminated, he must close the facility and perform postclosure care in accordance with closure and postclosure care requirements that apply to landfills (265.310). For permitted units, the requirement to have a permit continues throughout the postclosure period.
- (c) (1) The owner or operator of an existing drip pad, as defined in 265.440 of this subpart, that does not comply with the liner requirements of 265.443(b)(1) must:
- (i) Include in the closure plan for the drip pad under 265.112 both a plan for complying with paragraph (a) of this section and a contingent plan for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure: and
- (ii)Prepare a contingent postclosure plan under 265.118 of this part for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure.
- (2) The cost estimates calculated under 265.112 and 265.144 of this part for closure and postclosure care of a drip pad subject to this paragraph must include the cost of complying with the contingent closure plan and the contingent postclosure plan, but are not required to include the cost of expected closure under paragraph (a) of this section.

Subparts X-Z [Reserved]

Subpart AA - AIR EMISSION STANDARDS FOR PROCESS VENTS (12/92)

265.1030 Applicability

(a) The regulations in this subpart apply to owners and operators of facilities that treat, store, or dispose of

hazardous wastes (except as provided in 265.1).

- (b) Except for 265.1034, paragraphs (d) and (e), this subpart applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in one of the following: (9/98)
- (1) A unit that is subject to the permitting requirements of part 270, or (9/98)
- (2) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 262.34(a) (i.e., a hazardous waste recycling unit that is not a 90-day tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of part 270, or (9/98)
- (3) A unit that is exempt from permitting under the provisions of 262.34(a) (i.e., a 90-day tank or container) and is not a recycling unit under the requirements of 261.6. (9/98, 11/99)

 Note: The requirements of 265.1032 through 265.1036 apply to process vents on hazardous waste recycling units previously exempt under paragraph 261.6(c)(1). Other exemptions under 261.4 and 265.1(c) are not affected by these requirements.
 - (c) [Reserved (11/99)]
- (d) The requirements of this subpart do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to this subpart are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with, or made readily available with, the facility operating record. (11/99)

265.1031 Definitions

As used in this subpart, all terms shall have the meaning given them in 264.1031, the Act, and parts 260-266.

265.1032 Standards: Process vents

- (a) The owner or operator of a facility with process vents associated with distillation, fractionation, thinfilm evaporation, solvent extraction or air or steam stripping operations managing hazardous wastes with organic concentrations at least 10 ppmw shall either:
- (1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr), or
- (2) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.
- (b) If the owner or operator installs a closed-vent system and control device to comply with the provisions of paragraph (a) of this section, the closed-vent system

and control device must meet the requirements of 265.1033.

- (c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests must conform with the requirements of 265.1034(c).
- (d) When an owner or operator and the Department do not agree on determinations of vent emissions and/or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the test methods in 265.1034(c) shall be used to resolve the disagreement.

265.1033 Standards: Closed-vent systems and control devices

- (a) (1) Owners or operators of closed-vent systems and control devices used to comply with provisions of this part shall comply with the provisions of this section.
- (2) (i) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the requirements of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup. (9/98, 11/99; 8/00)
- (ii) Any unit that begins operation after December 21, 1990, and is subject to the requirements of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply. (11/99)
- The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the

applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility. (11/99)

- (iv) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997, due to an action other than those described in paragraph (a)(2)(iii) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply). (11/99)
- (b) A control device involving vapor recovery (e.g., a condenser or adsorber) shall be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of 265.1032(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.
- (c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 EC. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame combustion zone of the boiler or process heater.
- (d) (1) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (e)(1) of this section, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (2) A flare shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f)(2)(iii) of this section.
- (3) A flare shall be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater, if the flare is steam-assisted or air-assisted; or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (e)(2) of this section.
- (4) (i) A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, of less than 18.3 m/s (60 ft/s), except as provided in paragraphs (d)(4) (ii) and (iii) of this section.
- (ii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, equal to or greater than 18.3 m/s (60 ft/s)

but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

- (iii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in paragraph (e)(3) of this section, less than the velocity, V_{max} , as determined by the method specified in paragraph (e)(4) of this section, and less than 122 m/s (400 ft/s) is allowed.
- (5) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity, V_{max} , as determined by the method specified in paragraph (e)(5) of this section.
- (6) A flare used to comply with this section shall be steam-assisted. air-assisted, or nonassisted.
- (e) (1) Reference Method 22 in 40 CFR part 60 shall be used to determine the compliance of a flare with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
- (2) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \left[\begin{array}{c} n \\ \sum \\ i = 1 \end{array} C_i H_i \right]$$

- H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 EC and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mol is 20 EC;
- $K = Constant, 1.74x10^{-7} (1/ppm) (g mol/scm)$ (MJ/kcal) where standard temperature for (g mol/scm) is 20 EC:
- C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR part 60 and measured for hydrogen and carbon monoxide by ASTM D 1946-82 (incorporated by reference as specified in 260.11); and H_i = Net heat of combustion of sample component i. kcal/g mol at 25 EC and 760 mm Hg. The heats of combustion may be determined using ASTM D 2382-83 (incorporated by reference as specified in 260.11) if published values are not available or cannot be calculated.
- (3) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR part 60 as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.
- (4) The maximum allowed velocity in m/s, V_{max}, for a flare complying with paragraph (d)(4)(iii) of this section shall be determined by the following equation:

 $Log_{10}(V_{max})=(H_T+28.8)/31.7$

where: $H_T =$ The net heating value as determined in

paragraph (e)(2) of this section.

28.8 = Constant

31.7 = Constant.

(5) The maximum allowed velocity in m/s, V_{max} , for an air-assisted flare shall be determined by the following equation:

$$V_{\text{max}} = 8.706 + 0.7084 (H_T)$$

where:

8.706 = Constant.

0.7084 = Constant.

 H_T = The net heating value as determined in paragraph (e)(2) of this section.

- (f) The owner or operator shall monitor and inspect each control device required to comply with this section to ensure proper operation and maintenance of the control device by implementing the following requirements:
- (1) Install, calibrate, maintain, and operate according to the manufacturers specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet, but before being combined with other vent streams.
- (2) Install, calibrate, maintain, and operate according to the manufacturers specifications a device to continuously monitor control device operation as specified below:
- (i) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of "1 percent of the temperature being monitored in EC or "0.5 EC. whichever is greater. The temperature sensor shall be installed at a location in the combustion chamber downstream of the combustion zone.
- (ii) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations and have an accuracy of " 1 percent of the temperature being monitored in EC or "0.5 EC. whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.
- (iii) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.
- For a boiler or process heater having a design heat input capacity less than 44 MW, a

temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of "1 percent of the temperature being monitored in EC or "0.5 EC, whichever is greater. The temperature sensor shall be installed at a location in the furnace downstream of the combustion zone.

- (v) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.
 - (vi) For a condenser, either:
- (A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or
- (B) A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of "1 percent of the temperature being monitored in degrees Celsius (°C) or "0.5°C, whichever is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser exit (i.e., product side). (9/98)
- (vii) For a carbon adsorption system such as a fixed bed carbon adsorber that regenerates the carbon bed directly in the control device, either:
- (A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or
- (B) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.
- (3) Inspect the readings from each monitoring device required by paragraphs (f) (1) and (2) of this section at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this section.
- (g) An owner or operator using a carbon adsorption system such as a fixed bed carbon adsorber that regenerates the carbon bed directly onsite in the control device, shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of 265.1035(b)(4)(iii)(F).
- (h) An owner or operator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:
- (1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule and replace the

existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of 265.1035(b)(4)(iii)(G), whichever is longer.

- (2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of 265.1035(b)(4)(iii)(G).
- (i) An owner or operator of an affected facility seeking to comply with the provisions of this part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.
- (j) A closed-vent system shall meet either of the following design requirements: (9/98)
- (1) A closed-vent system shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in 265.1034(b) of this subpart, and by visual inspections; or (9/98)
- (2) A closed-vent system shall be designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating. (9/98)
- (k) The owner or operator shall monitor and inspect each closed-vent system required to comply with this section to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements: (9/98)
- (1) Each closed-vent system that is used to comply with paragraph (j)(1) of this section shall be inspected and monitored in accordance with the following requirements: (9/98)
- (i) An initial leak detection monitoring of the closed-vent system shall be conducted by the owner or operator on or before the date that the system becomes subject to this section. The owner or operator shall monitor the closed-vent system components and connections using the procedures specified in 265.1034(b) of this subpart to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background. (9/98)
- (ii) After initial leak detection monitoring required in paragraph (k)(1)(i) of this section, the owner or operator shall inspect and monitor the closed-vent system as follows: (9/98)

- (A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The owner or operator shall monitor a component or connection using the procedures specified in 265.1034(b) of this subpart to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted). (9/98)
- (B) Closed-vent system components or connections other than those specified in paragraph (k)(1)(ii)(A) of this section shall be monitored annually and at other times as requested by the Department, except as provided for in paragraph (n) of this section, using the procedures specified in 265.1034(b) of this subpart to demonstrate that the components or connections operate with no detectable emissions. (9/98)
- (iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect or leak in accordance with the requirements of paragraph (k)(3) of this section. (9/98)
- (iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in 265.1035 of this subpart. (9/98)
- (2) Each closed-vent system that is used to comply with paragraph (j)(2) of this section shall be inspected and monitored in accordance with the following requirements: (9/98)
- (i) The closed-vent system shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections. (9/98)
- (ii) The owner or operator shall perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year. (9/98)
- (iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (k)(3) of this section. (9/98)
- (iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in 265.1035 of this subpart. (9/98)
- (3) The owner or operator shall repair all detected defects as follows: (9/98)
- (i) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, shall be controlled as soon as practicable, but not later than 15 calendar days after the

- emission is detected, except as provided for in paragraph (k)(3)(iii) of this section. (9/98)
- (ii) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected. (9/98)
- (iii) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown. (9/98)
- (iv) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in 265.1035 of this subpart. (9/98)
- (*l*) Closed-vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them. (9/98)
- (m) The owner or operator using a carbon adsorption system to control air pollutant emissions shall document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon: (9/98)
- (1) Regenerated or reactivated in a thermal treatment unit that meets one of the following: (9/98)
- (i) The owner or operator of the unit has been issued a final permit under part 270 which implements the requirements of part 264 subpart X; or (9/98)
- (ii) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of subparts AA and CC of either this part or of part 264; or (9/98)
- (iii) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR part 61 or 40 CFR part 63. (9/98)
- (2) Incinerated in a hazardous waste incinerator for which the owner or operator either: (9/98)
- (i) Has been issued a final permit under part 270 which implements the requirements of part 264, subpart O; or (9/98)
- (ii) Has designed and operates the incinerator in accordance with the interim status requirements of subpart O of this part. (9/98)
- (3) Burned in a boiler or industrial furnace for which the owner or operator either: (9/98)
- (i) Has been issued a final permit under part 270 which implements the requirements of part 266, subpart H; or (9/98)
- (ii) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of part 266, subpart H. (9/98)
 - (n) Any components of a closed-vent system that are

designated, as described in 265.1035(c)(9) of this subpart, as unsafe to monitor are exempt from the requirements of paragraph (k)(1)(ii)(B) of this section if: (9/98)

- (1) The owner or operator of the closed-vent system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (k)(1)(ii)(B) of this section; and (9/98)
- (2) The owner or operator of the closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in paragraph (k)(1)(ii)(B) of this section as frequently as practicable during safe-to-monitor times. (9/98)

265.1034 Test methods and procedures

- (a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.
- (b) When a closed-vent system is tested for compliance with no detectable emissions, as required in 265.1033(k) of this subpart, the test shall comply with the following requirements: (9/98)
- (1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.
- (2) The detection instrument shall meet the performance criteria of Reference Method 21.
- (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.
 - (4) Calibration gases shall be:
- (i) Zero air (less than 10 ppm of hydrocarbon in air).
- (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
- (5) The background level shall be determined as set forth in Reference Method 21.
- (6) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.
- (7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
- (c) Performance tests to determine compliance with 265.1032(a) and with the total organic compound concentration limit of 265.1033(c) shall comply with the following:
- (1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:
- (i) Method 2 in 40 CFR part 60 for velocity and volumetric flow rate.

- (ii) Method 18 in 40 CFR part 60 for organic content.
- (iii) Each performance test shall consist of three separate runs; each run conducted for at least 1 hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.
- (iv) Total organic mass flow rates shall be determined by the following equation:

$$E_h = Q_{sd} \begin{bmatrix} n \\ \sum_{i=1}^{n} C_i M W_i \end{bmatrix} [0.0416] [10^{-6}]$$

where:

 E_h = Total organic mass flow rate, kg/h;

 Q_{sd} = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

n = Number of organic compounds in the vent gas;

C_i= Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18:

MW_i= Molecular weight of organic compound i in the vent gas, kg/kg-mol;

0.0416 = Conversion factor for molar volume, kg-mol/m³ (@ 293 K and 760 mm Hg);

10-6 = Conversion from ppm, ppm-1.

(v) The annual total organic emission rate shall be determined by the following equation:

$$E_A=(E_h)(H)$$

where:

 E_A = Total organic mass emission rate, kg/y;

 E_h = Total organic mass flow rate for the process vent, kg/h.

H = Total annual hours of operations for the affected unit, h.

- (vi) Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates $(E_h$, as determined in paragraph (c)(1)(iv) of this section) and by summing the annual total organic mass emission rates $(E_A$, as determined in paragraph (c)(1)(v) of this section) for all affected process vents at the facility.
- (2) The owner or operator shall record such process information as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.
- (3) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- (i) Sampling ports adequate for the test methods specified in paragraph (c)(1) of this section.
 - (ii) Safe sampling platform(s).
 - (iii) Safe access to sampling platform(s).
- (iv) Utilities for sampling and testing equipment.
- (4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operators control, compliance may, upon the Department's approval, be determined using the average of the results of the two other runs.
- (d) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this subpart, the owner or operator must make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one of the following two methods:
- (1) Direct measurement of the organic concentration of the waste using the following procedures:
- (i) The owner or operator must take a minimum of four grab samples of waste for each waste stream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.
- (ii) For waste generated onsite, the grab samples must be collected at a point before the waste is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated offsite, the grab samples must be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.
- (iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060 or 8260 of SW-846 (incorporated by reference under 260.11). (9/98)
- (iv) The arithmetic mean of the results of the analyses of the four samples shall apply for each waste stream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each waste stream managed in the unit.

- (2) Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a waste stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.
- (e) The determination that distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous wastes with time-weighted annual average total organic concentrations less than 10 ppmw shall be made as follows:
- (1) By the effective date that the facility becomes subject to the provisions of this subpart or by the date when the waste is first managed in a waste management unit, whichever is later; and
 - (2) For continuously generated waste, annually; or
- (3) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.
- (f) When an owner or operator and the Department do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the procedures in Method 8260 of SW-846 (incorporated by reference under 260.11) may be used to resolve the dispute. (9/98)

265.1035 Recordkeeping requirements

- (a) (1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
- (2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.
- (b) Owners and operators must record the following information in the facility operating record:
- (1) For facilities that comply with the provisions of 265.1033(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be in the facility

operating record by the effective date that the facility becomes subject to the provisions of this subpart.

- (2) Up-to-date documentation of compliance with the process vent standards in 265.1032. including:
- (i) Information and data identifying all affected process vents, annual throughput end operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan); and
- (ii) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action (e.g., managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.
- (3) Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan must include:
- (i) A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.
- (ii) A detailed engineering description of the closed-vent system and control device including:
- (A) Manufacturers name and model number of control device.
 - (B) Type of control device.
 - (C) Dimensions of the control device.
 - (D) Capacity.
 - (E) Construction materials.
- (iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.
- (4) Documentation of compliance with 265.1033 shall include the following information:

- (i) A list of all information references and sources used in preparing the documentation.
- (ii) Records, including the dates, of each compliance test required by 265.1033(j).
- (iii) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of APTI Course 415: Control of Gaseous Emissions (incorporated by reference as specified in 260.11) or other engineering texts acceptable to the Department that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with paragraphs (b)(4)(iii)(A) through (b)(4)(iii)(G) of this section may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.
- (A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.
- (B) For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.
- (C) For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.
- (D) For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in 265.1033(d).
- (E)For a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.
- (F) For a carbon adsorption system such as a fixed bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds,

type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

- (G) For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.
- (iv) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.
- (v) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of 265.1032(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of 265.1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.
- (vi) If performance tests are used to demonstrate compliance, all test results.
- (c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of this part shall be recorded and kept up-to-date in the facility operating record. The information shall include:
- (1) Description and date of each modification that is made to the closed-vent system or control device design.
- (2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with 265.1033(f)(1) and (f)(2).
- (3) Monitoring, operating and inspection information required by paragraphs (f) through (k) of 265.1033 of this subpart. (9/98)
- (4) Date, time, and duration of each period that occurs while the control device is operating when any

monitored parameter exceeds the value established in the control device design analysis as specified below:

- (i) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 seconds at a minimum temperature of 760EC, period when the combustion temperature is below 760EC.
- (ii) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 percent or greater, period when the combustion zone temperature is more than 28EC below the design average combustion zone temperature established as a requirement of paragraph (b)(4)(iii)(A) of this section.
- (iii) For a catalytic vapor incinerator, period when:
- (A) Temperature of the vent stream at the catalyst bed inlet is more than 28EC below the average temperature of the inlet vent stream established as a requirement of paragraph (b)(4)(iii)(B) of this section; or
- (B) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of paragraph (b)(4)(iii)(B) of this section.
- (iv) For a boiler or process heater, period when:
- (A) Flame zone temperature is more than 28EC below the design average flame zone temperature established as a requirement of paragraph (b)(4)(iii)(C) of this section; or
- (B) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of paragraph (b)(4)(iii)(C) of this section.
- (v) For a flare, period when the pilot flame is not ignited.
- (vi) For a condenser that complies with 265.1033(f)(2)(vi)(A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(E) of this section.
- (vii) For a condenser that complies with 265.1033(f)(2)(vi)(B), period when:
- (A) Temperature of the exhaust vent stream from the condenser is more than 6 EC above the design average exhaust vent stream temperature established as a requirement of paragraph (b)(4)(iii)(E) of this section; or
- (B) Temperature of the coolant fluid exiting the condenser is more than 6 EC above the design average coolant fluid temperature at the condenser outlet established as a requirement of paragraph (b)(4)(iii)(E) of this section.
- (viii) For a carbon adsorption system such as a fixed bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with 265.1033(f)(2)(vii)(A), period when the organic

compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of paragraph (b)(4)(iii)(F) of this section.

- (ix) For a carbon adsorption system such as a fixed bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with 265.1033(f)(2)(vii)(B), period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of paragraph (b)(4)(iii)(F) of this section.
- (5) Explanation for each period recorded under paragraph (c)(4) of this section of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.
- (6) For carbon adsorption systems operated subject to requirements specified in 265.1033(g) or 265.1033(h)(2), date when existing carbon in the control device is replaced with fresh carbon.
- (7) For carbon adsorption systems operated subject to requirements specified in 265.1033(h)(1), a log that records:
- (i) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.
- (ii) Date when existing carbon in the control device is replaced with fresh carbon.
- (8) Date of each control device startup and shutdown.
- (9) An owner or operator designating any components of a closed-vent system as unsafe to monitor pursuant to 265.1033(n) of this subpart shall record in a log that is kept in the facility operating record the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of 265.1033(n) of this subpart, an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component. (9/98)
- (10) When each leak is detected as specified in 265.1033(k) of this subpart, the following information shall be recorded: (9/98)
- (i) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.
- (ii) The date the leak was detected and the date of first attempt to repair the leak.
 - (iii) The date of successful repair of the leak.
- (iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, Appendix A after it is successfully repaired or determined to be nonrepairable.
- (v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days

after discovery of the leak.

- (A) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
- (B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
- (d) Records of the monitoring, operating, and inspection information required by paragraphs (c)(3) through (c)(10) of this section shall be maintained by the owner or operator for at least 3 years following the date of each occurrence, measurement, maintenance, corrective action, or record. (9/98)
- (e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device must be recorded in the facility operating record.
- (f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in 265.1032 including supporting documentation as required by 265.1034(d)(2) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used, shall be recorded in a log that is kept in the facility operating record.

265.1036 - 265.1049 Reserved]

Subpart BB - AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS (12/92)

265.1050 Applicability

- (a) The regulations in this subpart apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in 265.1).
- (b) Except as provided in 265.1064(k), this subpart applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following: (9/98)
- (1) Units that are subject to the permitting requirements of part 270, or
- (2) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 262.34(a) (i.e., a hazardous waste recycling unit that is not a 90-day tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of part 270, or (9/98)
- (3) A unit that is exempt from permitting under the provisions of 262.34(a) (i.e., a "90-day" tank or container) and is not a recycling unit under the provisions of 261.6. (9/98, 11/99)

- (c) Each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.
- (d) Equipment that is in vacuum service is excluded from the requirements of 265.1052 to 265.1060 if it is identified as required in 265.1064(g)(5).
- (e) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year is excluded from the requirements of 265.1052 through 265.1060 of this subpart if it is identified as required in 265.1064(g)(6) of this subpart. (9/98) [Note: The requirements of 265.1052 through 265.1064 apply to equipment associated with hazardous waste recycling units previously exempt under paragraph 261.6(c)(1). Other exemptions under 261.4, 262.34, and 265.1(c) are not affected by these requirements.]

265.1051 Definitions

As used in this subpart, all terms shall have the meaning given them in 264.1031, the Act, and parts 260 - 266.

265.1052 Standards: Pumps in light liquid service

- (a) (1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 265.1063(b), except as provided in paragraphs (d), (e), and (f) of this section.
- (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- (b) (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (2) If there are indications of liquids dripping from the pump seal, a leak is detected.
- (c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 265.1059.
- (2) A first attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected.
- (d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), provided the following requirements are met:
 - (1) Each dual mechanical seal system must be:
- (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure, or
- (ii) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of 265.1060, or
- (iii) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to the atmosphere.
- (2) The barrier fluid system must not be a hazardous waste with organic concentrations 10 percent

or greater by weight.

- (3) Each barrier fluid system must be equipped with a sensor that will detect failure of the seal system, the barrier fluid system or both.
- (4) Each pump must be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
- (5) (i) Each sensor as described in paragraph (d)(3) of this section must be checked daily or be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly.
- (ii) The owner or operator must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- (6) (i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii) of this section, a leak is detected.
- (ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 265.1059.
- (iii) A first attempt at repair (e.g., relapping the seal) shall be made no later than 5 calendar days after each leak is detected.
- (e) Any pump that is designated, as described in 265.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump meets the following requirements:
- (1) Must have no externally actuated shaft penetrating the pump housing.
- (2) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 265.1063(c).
- (3) Must be tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times as requested by the Department.
- (f) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 265.1060, it is exempt from the requirements of paragraphs (a) through (e) of this section.

265.1053 Standards: Compressors

- (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in paragraphs (h) and (i) of this section.
- (b) Each compressor seal system as required in paragraph (a) of this section shall be:
- (1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing

box pressure, or

- (2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of 265.1060, or
- (3) Equipped with a system that purges the barrier fluid into a hazardous waste stream with no detectable emissions to atmosphere.
- (c) The barrier fluid must not be a hazardous waste with organic concentrations 10 percent or greater by weight.
- (d) Each barrier fluid system as described in paragraphs (a) through (c) of this section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
- (e) (1) Each sensor as required in paragraph (d) of this section shall be checked daily or shall be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor must be checked daily.
- (2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system or both.
- (f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.
- (g) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 265.1059.
- (2) A first attempt at repair (e.g., tightening the packing gland) shall be made no later than 5 calendar days after each leak is detected.
- (h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of 265.1060, except as provided in paragraph (i) of this section.
- (i) Any compressor that is designated, as described in 265.1064(g)(2), for no detectable emission as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of paragraphs (a) through (h) of this section if the compressor:
- (1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 265.1063(c).
- (2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times as requested by the Department.

265.1054 Standards: Pressure relief devices in gas/vapor service

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with

- no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 265.1063(c).
- (b) (1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 265.1059.
- (2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in 265.1063(c).
- (c) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 265.1060 is exempt from the requirements of paragraphs (a) and (b) of this section.

265.1055 Standards: Sampling connecting systems

- (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. This system shall collect the sample purge for return to the process or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured. (9/98)
- (b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall: (9/98)
- (1) Return the purged process fluid directly to the process line; or (9/98)
- (2) Collect and recycle the purged process fluid; or (9/98)
- (3) Be designed and operated to capture and transport all the purged process fluid to a waste management unit that complies with the applicable requirements of 265.1085 through 265.1087 of this subpart or a control device that complies with the requirements of 265.1060 of this subpart. (9/98)
- (c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section. (9/98)

265.1056 Standards: Open ended valves or lines

- (a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.
- (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring hazardous waste stream flow through the open ended valve or line.
- (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the hazardous waste stream end is closed before the second valve is closed.

(c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of this section at all other times.

265.1057 Standards: Valves in gas/vapor service or in light liquid service

- (a) Each valve in gas/vapor or light liquid service shall be monitored monthly to detect leaks by the methods specified in 265.1063(b) and shall comply with paragraphs (b) through (e) of this section, except as provided in paragraphs (f), (g), and (h) of this section and 265.1061 and 265.1062.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) (1) Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.
- (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
- (d) (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 265.1059.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
 - (1) Tightening of bonnet bolts.
 - (2) Replacement of bonnet bolts.
 - (3) Tightening of packing gland nuts.
 - (4) Injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in 265.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this section if the valve:
- (1) Has no external actuating mechanism in contact with the hazardous waste stream.
- (2) Is operated with emissions less than 500 ppm above background as determined by the method specified in 265.1063(c).
- (3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times as requested by the Department.
- (g) Any valve that is designated, as described in 265.1064(h)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:
- (1) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this
- written plan that requires monitoring of the valve as

frequently as practicable during safe-to-monitor times.

- (h) Any valve that is designated, as described in 265.1064(h)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:
- (1) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
- (2) The hazardous waste management unit within which the valve is located was in operation before June 21, 1990.
- (3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

265.1058 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors

- (a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in 265.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 265.1059.
- (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (d) First attempts at repair include, but are not limited to, the best practices described under 265.1057(e).
- (e) Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined) is exempt from the monitoring requirements of paragraph (a) of this section and from the Record keeping requirements of 265.1064 of this subpart. (9/98)

265.1059 Standards: Delay of repair

- (a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a hazardous waste management unit shutdown. In such a case, repair of this equipment shall occur before the end of the next hazardous waste management unit shutdown.
- (b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the hazardous waste management unit and that does not continue to contain or contact hazardous waste with organic concentrations at least 10 percent by weight.
 - (c) Delay of repair for valves will be allowed if:
- (1) The owner or operator determines that emissions of purged material resulting from immediate (2) The owner or operator of the valve adheres to a repair are greater than the emissions likely to result from delay of repair.

- (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 265.1060.
 - (d) Delay of repair for pumps will be allowed if:
- (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system.
- (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- (e) Delay of repair beyond a hazardous waste management unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the hazardous waste management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous waste management unit shutdown will not be allowed unless the next hazardous waste management unit shutdown occurs sooner than 6 months after the first hazardous waste management unit shutdown.

265.1060 Standards: Closed-vent systems and control devices

- (a) Owners and operators of closed-vent systems and control devices subject to this subpart shall comply with the provisions of 265.1033 of this part. (11/99)
- (b) (1) The owner or operator of an existing facility who can not install a closed-vent system and control device to comply with the provisions of this subpart on the effective date that the facility becomes subject to the provisions of this subpart must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this subpart for installation and startup. (11/99)
- (2) Any units that begin operation after December 21, 1990, and are subject to the provisions of this subpart when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply. (11/99)
- (3) The owner or operator of any facility in existence on the effective date of a statutory or EPA regulatory amendment that renders the facility subject to this subpart shall comply with all requirements of this subpart as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this subpart can not be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment

- installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this subpart. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility. (11/99)
- (4) Owners and operators of facilities and units that become newly subject to the requirements of this subpart after December 8, 1997 due to an action other than those described in paragraph (b)(3) of this section must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this subpart; the 30-month implementation schedule does not apply). (11/99)

265.1061 Alternative standards for valves in gas/vapor service or in light liquid service: percentage of valves allowed to leak

- (a) An owner or operator subject to the requirements of 265.1057 may elect to have all valves within a hazardous waste management unit comply with an alternative standard which allows no greater than 2 percent of the valves to leak.
- (b) The following requirements shall be met if an owner or operator decides to comply with the alternative standard of allowing 2 percent of valves to leak:
- (1) An owner or operator must notify the Department that the owner or operator has elected to comply with the requirements of this section.
- (2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Department.
- (3) If a valve leak is detected, it shall be repaired in accordance with 265.1057 (d) and (e).
- *(c)* Performance tests shall be conducted in the following manner:
- (1) All valves subject to the requirements in 265.1057 within the hazardous waste management unit shall be monitored within 1 week by the methods specified in 265.1063(b).
- (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (3) The leak percentage shall be determined by dividing the number of valves subject to the requirements in 265.1057 for which leaks are detected by the total number of valves subject to the requirements in 265.1057 within the hazardous waste management unit.
- (d) If an owner or operator decides no longer to comply with this section, the owner or operator must notify the Department in writing that the work practice standard described in 265.1057 (a) through (e) will be followed.

265.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip

period leak detection and repair

- (a) (1) An owner or operator subject to the requirements of 265.1057 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in paragraphs (b) (2) and (3) of this section.
- (2) An owner or operator must notify the Department before implementing one of the alternative work practices.
- (b) (1) An owner or operator shall comply with the requirements for valves, as described in 265.1057, except as described in paragraphs (b)(2) and (b)(3) of this section.
- (2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip one of the quarterly leak detection periods (i.e., monitor for leaks once every six months) for the valves subject to the requirements in 265.1057 of this subpart. (11/99)
- (3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 percent, an owner or operator may begin to skip three of the quarterly leak detection periods (i.e., monitor for leaks once every year) for the valves subject to the requirements in 265.1057 of this subpart. (11/99)
- (4) If the percentage of valves leaking is greater than 2 percent, the owner or operator shall monitor monthly in compliance with the requirements in 265.1057, but may again elect to use this section after meeting the requirements of 265.1057(c)(1).

265.1063 Test methods and procedures

- (a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.
- (b) Leak detection monitoring, as required in 265.1052 265.1062, shall comply with the following requirements:
- (1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.
- (2) The detection instrument shall meet the performance criteria of Reference Method 21.
- (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.
 - (4) Calibration gases shall be:
- (i) Zero air (less than 10 ppm of hydrocarbon in air).
- (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10.000 ppm methane or n-hexane.
- (5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.
- (c) When equipment is tested for compliance with no detectable emissions, as required in 265.1052(e), 265.1053(i), 265.1054, and 265.1057(f), the test shall

comply with the following requirements:

- (1) The requirements of paragraphs (b) (1) through (4) of this section shall apply.
- (2) The background level shall be determined, as set forth in Reference Method 21.
- (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.
- (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
- (d) In accordance with the waste analysis plan required by 265.13(b), an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:
- (1) Methods described in ASTM Methods D 2267-88, E 169-87, E 168-88, E 260-85 (incorporated by reference under 260.11);
- (2) Method 9060 or 8260 of SW-846 (incorporated by reference under 260.11); or (9/98)
- (3) Application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.
- (e) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in paragraph (d)(1) or (d)(2) of this section.
- (f) When an owner or operator and the Department do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in paragraph (d)(1) or (d)(2) of this section can be used to resolve the dispute.
- (g) Samples used in determining the percent organic content shall be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.
- (h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents may be obtained from standard reference texts or may be determined by ASTM D-2879-86 (incorporated by reference under 260.11).

(i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction shall comply with the procedures of 265.1034 (c)(1) through (c)(4).

265.1064 Recordkeeping requirements

- (a) (1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
- (2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.
- (b) Owners and operators must record the following information in the facility operating record:
- (1) For each piece of equipment to which subpart BB of part 265 applies:
- (i) Equipment identification number and hazardous waste management unit identification.
- (ii) Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan).
- (iii) Type of equipment (e.g., a pump or pipeline valve).
- (iv) Percent-by-weight total organics in the hazardous waste stream at the equipment.
- (v) Hazardous waste state at the equipment (e.g., gas/vapor or liquid).
- (vi) Method of compliance with the standard (e.g., monthly leak detection and repair or equipped with dual mechanical seals).
- (2) For facilities that comply with the provisions of 265.1033(a)(2), an implementation schedule as specified in 265.1033(a)(2).
- (3) Where an owner or operator chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan as specified in 265.1035(b)(3).
- (4) Documentation of compliance with 265.1060, including the detailed design documentation or performance test results specified in 265.1035(b)(4).
- (c) When each leak is detected as specified in 265.1052, 265.1053, 265.1057, and 265.1058, the following requirements apply:
- (1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with 265.1058(a), and the date the leak was detected, shall be attached to the leaking equipment.
- (2) The identification on equipment, except on a valve, may be removed after it has been repaired.
- (3) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 265.1057(c) and no leak has been detected

during those 2 months.

- (d) When each leak is detected as specified in 265.1052, 265.1053, 265.1057, and 265.1058, the following information shall be recorded in an inspection log and shall be kept in the facility operating record:
- (1) The instrument and operator identification numbers and the equipment identification number.
- (2) The date evidence of a potential leak was found in accordance with 265.1058(a).
- (3) The date the leak was detected and the dates of each attempt to repair the leak.
- (4) Repair methods applied in each attempt to repair the leak.
- (5) Above 10,000 if the maximum instrument reading measured by the methods specified in 265.1063(b) after each repair attempt is equal to or greater than 10,000 ppm.
- (6) Repair delayed and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- (7) Documentation supporting the delay of repair of a valve in compliance with 265.1059(c).
- (8) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown.
- (9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
 - (10) The date of successful repair of the leak.
- (e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of 265.1060 shall be recorded and kept up to date in the facility operating record as specified in 265.1035(c). Design documentation is specified in 265.1035 (c)(1) and (c)(2) and monitoring, operating, and inspection information in 265.1035 (c)(3) (c)(8).
- (f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device must be recorded in the facility operating record.
- (g) The following information pertaining to all equipment subject to the requirements in 265.1052 through 265.1060 shall be recorded in a log that is kept in the facility operating record:
- (1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart.
- (2) (i) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of 265.1052(e), 265.1053(i), and 265.1057(f).
- (ii) The designation of this equipment as subject to the requirements of 265.1052(e), 265.1053(i),

- or 265.1057(f) shall be signed by the owner or operator.
- (3) A list of equipment identification numbers for pressure relief devices required to comply with 265.1054(a).
- (4) (i) The dates of each compliance test required in 265.1052(e), 265.1053(i), 265.1054, and 265.1057(f).
- (ii) The background level measured during each compliance test.
- (iii) The maximum instrument reading measured at the equipment during each compliance test.
- (5) A list of identification numbers for equipment in vacuum service.
- (6) Identification, either by list or location (area or group) of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for a period of less than 300 hours per year. (9/98)
- (h) The following information pertaining to all valves subject to the requirements of 265.1057 (g) and (h) shall be recorded in a log that is kept in the facility operating record:
- (1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.
- (2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
- (i) The following information shall be recorded in the facility operating record for valves complying with 265.1062:
 - (1) A schedule of monitoring.
- (2) The percent of valves found leaking during each monitoring period.
- (j) The following information shall be recorded in a log that is kept in the facility operating record:
- (1) Criteria required in 265.1052(d)(5)(ii) and 265.1053(e)(2) and an explanation of the criteria.
- (2) Any changes to these criteria and the reasons for the changes.
- (k) The following information shall be recorded in a log that is kept in the facility operating record for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:
- (1) An analysis determining the design capacity of the hazardous waste management unit.
- (2) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in 265.1052 through 265.1060 and an analysis determining whether these hazardous wastes are heavy liquids.
- (3) An up to date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in 265.1052 through 265.1060. The record shall include supporting documentation as required by 265.1063(d)(3) when application of the knowledge of the nature of the

hazardous waste stream or the process by which it was produced is used. If the owner or operator takes any action (e.g., changing the process that produced the waste) that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be subject to the requirements in 265.1052 through 265.1060, then a new determination is required.

- (1) Records of the equipment leak information required by paragraph (d) of this section and the operating information required by paragraph (e) of this section need be kept only 3 years.
- (m) The owner or operator of any facility with equipment that is subject to this subpart and to leak detection, monitoring, and repair requirements under regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with this subpart either by documentation pursuant to 265.1064 of this subpart, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulation at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available with the facility operating record. (11/99; 8/00)

265.1065 - 265.1079 [Reserved]

Subpart CC - AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (9/98)

265.1080 Applicability

- (a) The requirements of this subpart apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to either subparts I, J, or K of this part except as 265.1 and paragraph (b) of this section provide otherwise.
- (b) The requirements of this subpart do not apply to the following waste management units at the facility:
- (1) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996 (11/99).
- (2) A container that has a design capacity less than or equal to 0.1 m³.
- (3) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.
- (4) A surface impoundment in which an owner or operator has stopped adding hazardous waste (except to implement an approved closure plan) and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.
- (5) A waste management unit that is used solely for on-site treatment or storage of hazardous waste that